IN THE SPECIFICATION:

1. Please amend the entire section entitled "Description of the Related Art" as follows.

~~In accordance with the high speed of data processing of computer devices, the data transfer speed needs to be fast between units or between devices. Consequently, a connecting method between the devices shifts from asynchronous transfer parallel bus connection using a read/write signal to the synchronous transfer parallel bus connection (e.g., a PCI bus) using a reference clock. Further, the transfer clock on the bus becomes fast and the serial bus is used to reduce the number of signals on the bus.~~ Synchronous data transmission (uni-directional) is known and can be faster relative to asynchronous data transmission (bi-directional). Japanese Patent Laid-Open No. 2002-230536 discloses a dedicated data transfer method, by which the data transfer is ~~not in the two-way directional but is~~ fixedly in the one-way direction. This has the advantage that the ~~The~~ serial bus reduces the number of signal lines and the physical connection between the devices becomes easy. Also, since ~~Since~~ the data transfer is in the one-way direction, the timing of an interface circuit is better designed. ~~with allowance.~~

Further, Japanese Patent Laid-Open No. 4-100446 discloses a data transfer system, wherein a ~~contents in which, upon receiving a packet error by a packet transferred between devices connected like a ring via a LAN,~~ the network is switched to a backup network ~~from a general network,~~ and a ~~fault~~faulty device is disconnected when a packet error is detected. The disadvantage is that for a~~Particular, in an~~an image forming apparatus, ~~unpreferably,~~ one portion of the image forming apparatus is disconnected and is not used. ~~Because each portion of the image forming apparatus is connected for executing a series of processing~~.

Furthermore, Japanese Patent Laid-Open No. 02-153655 discloses use of a ~~contents in which the~~ loop-back communication test in a communication control integrated circuit to determine[[s]] whether ~~or not~~ the communication control integrated circuit has a fault. To specify the fault portion, ~~in the circuit Japanese Patent Laid-Open No. 02-153655 needs~~ the loop-back communication test is needed for an internal portion as well as for ~~or the loop-back communication test for~~ an external portion, which results in complicated control circuitry. ~~and results in the complicated control.~~ In an apparatus which does not communicate with the external portion, it is too difficult to specify the fault portion.

As mentioned above, synchronous communication ~~the serial bus connection between the device and the one-way communication are important technologies~~is important for improving the speed of data transfer. When this data transfer mode is used, and devices are ~~and, however, when the individual device is connected like a~~ daisy ~~chain~~chained in ~~or like~~ a loop, ~~even any fault is caused in the connected portion and then the~~ access to all the devices is cut off when a fault occurs. ~~impossible.~~ Therefore, a user can find only the existence of fault and, inconveniently, the extensive test using a dedicated measuring instrument is necessary for identifying the ~~fault~~faulty portion.

A boundary scanning method is popular for ~~as the~~ fault diagnosis of devices in factories. ~~a factory.~~ However, the boundary scanning method is not suited to the self-diagnosis of devices for maintenance in the field. That is, the boundary scanning method needs a one-to-one correspondence ~~corresponding relationship~~ between test data and the device and, upon changing the device, use of the test data must be changed accordingly. ~~used in accordance with the changed device. Then, in the~~In self-diagnosis, the version of the device is checked and the test data suitable thereto ~~must~~ is ~~be~~ selected. However, since the device information is not readable because ~~while the~~ access to the device has

been cut off, ~~is impossible, additional~~ other ways such as using ~~means must be provided, e.g., necessary information is~~ previously stored information is used. Since ~~the~~ test data for boundary scanning is large ~~method has the size of~~ (approximately 100 KB per LSI) ~~in the case of a very large scale integrated circuit (VLSI),~~ pre-installing the test data is not cost effective. ~~has cost impact for embedded.~~

Therefore, one advantage of the present invention is that ~~It is an object of the present invention to provide~~it provides an electronic device in which, when a plurality of processors are connected in ~~like~~ a loop, for example, by a one-way bus, a faulty portion in the structure is easily detected.

2. Please amend and replace the paragraph beginning on page 24 line 9 and the paragraph beginning on Page 24, line 19 with the following replacement paragraph.

It is determined whether or nor the transmitted packet data is normally returned (step S2). If the transmitted packet data is normally returned, it is determined that it is "no abnormal", i.e. normal. If the transmitted packet data is not normally returned either because ~~or~~ the packet data is broken, or a ~~any~~ processor or the serial bus is faulty, then this case is abnormal. Note that as an example, the terms "normal" or "abnormal" relates to whether the transmitted packet is returned to the main processor within a predetermined time. Other examples of what relates to "normal" and "abnormal" are possible. ~~has the fault or it is considered that the serial bus for connecting the processors is abnormal.~~ In the abnormal~~this~~ case, the processing sequence of moves to ~~sequent to~~ step S3, where ~~generates the interrupt packet for the diagnosis to the processors and tests the processors and the connection between the processors.~~ a test signal, TEST3 signal from the I/O port 209 is asserted to the VI 110 at the most downstream position of the

serial bus loop starting from the MAIN 101 (step S3).

3. Please cancel the Abstract and replace it with a new Abstract which can be found in the Appendix.